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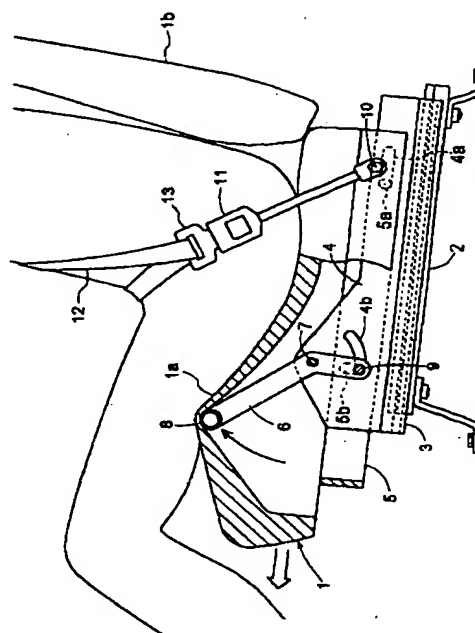
【発明の名称】 車両のシート構造

「続きあり」

(57)【要約】

【課題】 シートの座部の前部の下側に配置された移動阻止部材を上方に移動させて、着座した乗員がシートに対して前方に移動し沈み込もうとする状態を防止するように構成された車両のシート構造において、動力発生装置を使用せず且つシートベルトが緩まないようにして、移動阻止部材を上方に移動させる。

【解決手段】 前方への慣性力によりシート1の座部1aを支持する第2支持部材5が前方に移動するように構成し、シート1の座部1aの下側に位置し上方に移動することによって着座した乗員がシート1の座部1aに対して前方に移動する状態を阻止する移動阻止部材8を備える。前方への慣性力による第2支持部材5の前方への変位を移動阻止部材8に機械的に伝達して、移動阻止部材8を上方に移動させる連係手段6を備える。



【発明の属する技術分野】

本発明は、乗用車や商用車等の車両におけるシートの構造に関する。

【発明が解決しようとする課題】

従来の技術に記載の実開平4-13423号公報の構造においては、着座した乗員がシートに対して前方に移動し沈み込もうとして、バックル部が引き操作されると、バックル部の動作に伴い、シートに対してシートベルトが緩むことになるので好ましくない。

バックル部が引き操作された際のバックル部の動作を移動阻止部材に機械的に伝達するように構成する場合、機構の構成や配置等の面で、バックル部の位置と移動阻止部材の位置との間の距離は一定である必要がある。この場合、従来の技術に記載の実開平4-13423号公報の構造では、移動阻止部材がシートに備えられているので、シートの位置を前後方向に沿って変更しても、バックル部の位置と移動阻止部材の位置との間の距離が一定に維持されるようにするには、バックル部もシートに備えなければならない。これにより、従来【以下省略】

【特許請求の範囲】

【請求項1】 車体側に支持された第1支持部材と、シートの座部を支持する第2支持部材とを備えて、前方への慣性力により前記第2支持部材が前方に変位するように、前記第1支持部材に前記第2支持部材を移動自在に支持し、前記シートの座部の下側に位置し上方に移動することによって、着座した乗員が前記シートの座部に対して前方に移動する状態を阻止する移動阻止部材を備えると共に、前方への慣性力による前記第2支持部材の変位を前記移動阻止部材に機械的に伝達して、前記移動阻止部材を上方に移動させる連係手段を備えてある車両のシート構造。

【請求項2】 車体側に支持された第1支持部材と、シートの背もたれ部を支持する第2支持部材とを備えて、前方への慣性力により前記第2支持部材が上方に変位するように、前記第1支持部材の横軸芯周りに前記第2支持部材を揺動自在に支持し、前記シートの座部の下側に位置し上方に移動することに

よって、着座した乗員が前記シートの座部に対して前方に移動する状態を阻止する移動阻止部材を備えると共に

前方への慣性力による前記第2支持部材の変位を前記移動阻止部材に機械的に伝達して、前記移動阻止部材を上方に移動させる連係手段を備えてある車両のシート構造。

【請求項3】 前記第1支持部材に前記移動阻止部材を備えてある請求項1又は2に記載の車両のシート構造。

【請求項4】 前方への慣性力が設定値未満であると、前記第2支持部材の変位を阻止し、前方への慣性力が設定値以上に大きくなると、前記第2支持部材の変位を許すように、前記第2支持部材を保持する保持手段を備えてある請求項1～3のうちのいずれか一つに記載の車両のシート構造。

【請求項5】 車体に固定された案内部材に、前記第1支持部材を前後方向に沿って位置変更及び位置固定自在に支持してある請求項1～4のうちのいずれか一つに記載の車両のシート構造。

【書誌事項の続き】

【ターマコード（参考）】

3B087

【Fターム（参考）】

3B087 BD15 CD04

【図面の簡単な説明】

【図1】 通常の使用状態での第1及び第2支持部材の付近の縦断側面図

【図2】 設定値以上の大きな前方への慣性力により第2支持部材が前方に変位した状態での第1及び第2支持部材の付近の縦断側面図

【図3】 発明の実施の第1別形態において、通常の使用状態での第1及び第2支持部材の付近の縦断側面図

【図4】 発明の実施の第2別形態において、通常の使用状態での第1及び第2支持部材の付近の縦断側面図

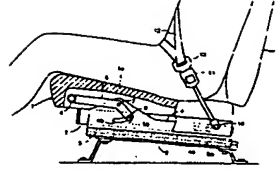
【図5】 発明の実施の第2別形態において、設定値以上の大きな前方への慣性力により第2支持部材が上方に変位した状態での第1及び第2支持部材の付近の縦断側面図

【図6】 発明の実施の第2別形態において、通常の使用状態での第1及び第2支持部材の付近の横断平面図

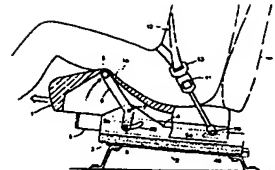
【符号の説明】

1	シート
1 a	シート
の座部	
1 b	シート
の背もたれ部	
2	案内部材
材	
4, 15	第1支持部材
5, 22	第2支持部材
7, 9, 14, 17, 20, 21, 23, 25	保持手段
6, 16, 19	連係手段
8, 18	移動阻止部材

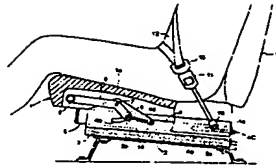
【図1】



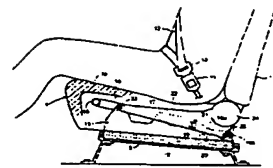
【図2】



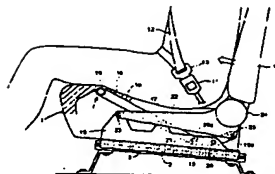
【図3】



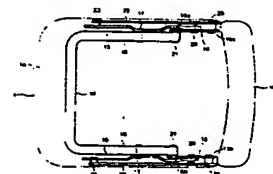
【図4】



【図5】



【図6】



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Bibliography

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- (43) [Date of Publication] January 9, Heisei 14 (2002. 1.9)
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- (51) [The 7th edition of International Patent Classification]

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[FI]

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[Theme code (reference)]

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[F term (reference)]

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Epitome

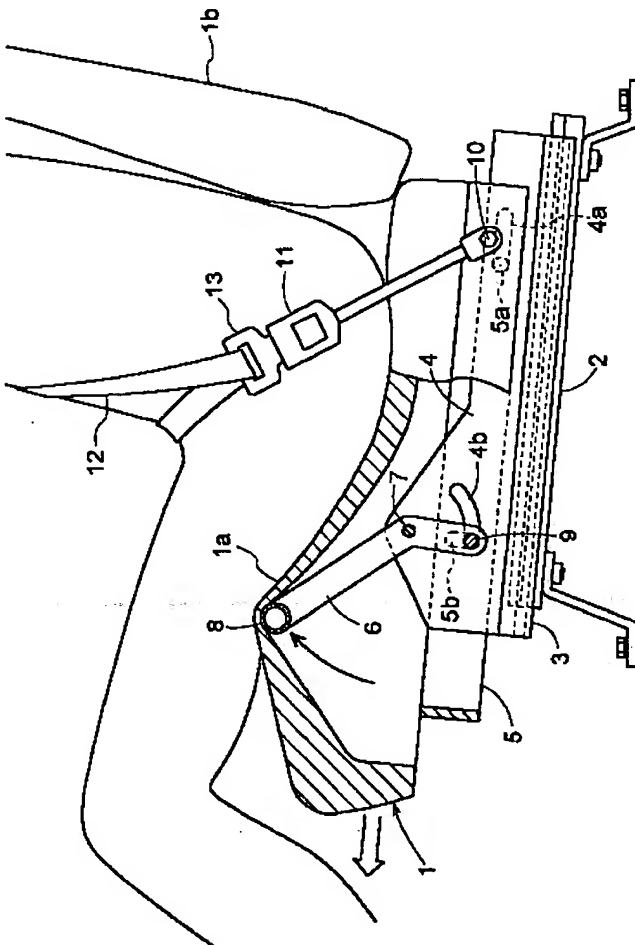
(57) [Abstract]

[Technical problem] The migration inhibition member arranged at the anterior part bottom of the seat of a sheet is moved up, and in the

sheet structure of the car constituted so that the condition that the crew who sat down is going to move and sink ahead to a sheet might be prevented, as a seat belt does not loosen not using a power generator, a migration inhibition member is moved up.

[Means for Solution] It constitutes so that the 2nd supporter material 5 which supports seat 1a of a sheet 1 with the inertial force to the front may move ahead, and it has the migration inhibition member 8 which prevents the condition that the crew who sat down by being located in the seat 1a bottom of a sheet 1, and moving up moves ahead to seat 1a of a sheet 1. The variation rate ahead of the 2nd supporter material 5 by the inertial force to the front is mechanically transmitted to the migration inhibition member 8, and it has the coordinated means 6 to which the migration inhibition member 8 is moved up.

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CLAIMS

[Claim(s)]

[Claim 1] The sheet structure of a car equipped with the coordinated means to which the variation rate of said 2nd supporter material according that it is characterized by providing the following to the inertial force to the front is mechanically transmitted to said migration inhibition member, and said migration inhibition member is both moved up The 1st supporter material supported at the car-body side The migration inhibition member which prevents the condition that the crew who sat down by supporting said 2nd supporter material to said 1st supporter material, enabling free migration, being located in the seat bottom of said sheet, and moving up moves ahead to the seat of said sheet so that it may have the 2nd supporter material which supports the seat of a sheet and said 2nd supporter material may displace ahead with the inertial force to the front

[Claim 2] The sheet structure of a car equipped with the coordinated means to which the variation rate of said 2nd supporter material according that it is characterized by providing the following to the inertial force to the front is mechanically transmitted to said migration inhibition member, and said migration inhibition member is both moved up The 1st supporter material supported at the car-body side So that it may have the 2nd

supporter material which supports the back board section of a sheet and said 2nd supporter material may displace up with the inertial force to the front The migration inhibition member which prevents the condition that the crew who sat down by supporting said 2nd supporter material, enabling free rocking, being located in the seat bottom of said sheet, and moving to the circumference of the axis-of-abscissa heart of said 1st supporter material up moves ahead to the seat of said sheet

[Claim 3] The sheet structure of the car according to claim 1 or 2 which equips said 1st supporter material with said migration inhibition member.

[Claim 4] The sheet structure of the car of any one publication among claims 1-3 equipped with a maintenance means to hold said 2nd supporter material so that the variation rate of said 2nd supporter material may be allowed if the variation rate of said 2nd supporter material is prevented as the inertial force to the front is under the set point, and the inertial force to the front becomes large beyond the set point.

[Claim 5] The sheet structure of the car of any one publication among claims 1-4 which have supported said 1st supporter material free [repositioning and location immobilization] along with the cross direction to the interior material of a proposal fixed to the car body.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the structure of the sheet in cars, such as a passenger car and a commercial vehicle.

[0002]

[Description of the Prior Art] After crew has sat down on the sheet, when a car collides, the condition (submarine phenomenon) that the crew (crew's lumbar part) who sat down moves and sinks ahead to a sheet with the inertial force to the front at this time may be produced. There are some which were constituted so that the condition that the crew who sat down by moving up the migration inhibition member (drawing 1 of said official report and 6 in drawing 2) arranged at the seat bottom of a sheet as indicated by JP, 2000-1136, A as a configuration which prevents the above conditions, and raising the anterior part of the seat of a sheet up is going to move and sink ahead to a sheet might be prevented. In this case, the power generator (drawing 1 of said official report and 7 in drawing 2) which operates a migration inhibition member by generating gas explosively is used like the inflator of air bag equipment.

[0003] On the other hand, as indicated by JP, 4-13423, U, for example If the crew who sat down is going to move ahead to a sheet and length actuation of the buckle section (15 in Fig. 1 and the 2nd Fig. of said official report) is done by crew through a seat belt Actuation of the buckle section is transmitted to a migration inhibition member (4 in Fig. 1 and the 2nd Fig. of said official report) through a rod (12 in Fig. 1 and the 2nd Fig. of said official report), and there are some which were constituted so that a migration inhibition member might move up. The crew who sat down is going to move and sink ahead to a sheet by this, the condition of the anterior part of the seat of a sheet being pushed by the thigh of the crew who sat down, and sinking is prevented by the migration inhibition member, and the condition that the crew who sat down is going to move and sink ahead to a sheet is prevented. Thus, by constituting using the phenomenon in which length actuation of the buckle section is carried out, so that a migration inhibition member may be moved up, a power generator like above-mentioned JP, 2000-1136, A becomes unnecessary, and will become

advantageous in respect of reduction of a production cost.

[0004]

[Problem(s) to be Solved by the Invention] Since a seat belt will loosen to a sheet with actuation of the buckle section when the crew who sat down is going to move ahead, sink in a Prior art to a sheet in the structure of JP,4-13423,U of a publication and length actuation of the buckle section is carried out, it is not desirable.

[0005] When it constitutes so that actuation of the buckle section at the time of length actuation of the buckle section being carried out may be mechanically transmitted to a migration inhibition member, the distance between the location of the buckle section and the location of a migration inhibition member needs to be fixed in respect of the configuration of a device, arrangement, etc. In this case, with the structure of JP,4-13423,U given in a Prior art, in order to maintain uniformly the distance between the location of the buckle section, and the location of a migration inhibition member even if it changes the location of a sheet along with a cross direction since the sheet is equipped with the migration inhibition member, a sheet must be equipped also with the buckle section. Thereby, with the structure of JP,4-13423,U given in a Prior art, the buckle section is what cannot respond to the type of a car with which the fixed part of a car body was equipped, and there is room of an improvement.

[0006] In the sheet structure of the car constituted so that the crew who this invention made move up the migration inhibition member arranged at the anterior part bottom of the seat of a sheet, and sat down might prevent the condition of it moving ahead to a sheet and sinking It aims at constituting so that a seat belt may not loosen when it constitutes so that a migration inhibition member may be moved up, without using a power generator, and aims at constituting so that it can respond also to the type of a car by which the fixed part of a car body was equipped with the buckle section.

[0007]

[Means for Solving the Problem] According to the description of [I] claim 1 (claim 2), the 2nd supporter material (the 2nd supporter material which supports the back board section of a sheet) which supports the seat of a sheet It is constituted so that it may

displace ahead (upper part) with the inertial force to the front, and it has the migration inhibition member which prevents the condition that the crew who sat down moves ahead to the seat of a sheet by being located in the seat bottom of a sheet and moving up. When the crew who sat down tries to move and sink ahead to a sheet by this according to the description of claim 1 (claim 2), the 2nd supporter material displaces ahead (upper part) with the inertial force to the front, the variation rate ahead of the 2nd supporter material (upper part) is mechanically transmitted to a migration inhibition member by the coordinated means, and a migration inhibition member moves up.

[0008] According to the description of claim 1 (claim 2), as mentioned above like the structure of JP,4-13423,U of a publication to a Prior art It does not constitute so that a migration inhibition member may be moved up by carrying out length actuation of the buckle section, when the crew who sat down tries to move and sink ahead to a sheet. Since it constitutes so that a migration inhibition member may be moved up, when the 2nd supporter material (the 2nd supporter material which supports the back board section of a sheet) which supports the seat of a sheet displaces ahead (upper part), the condition that it is said that a seat belt loosens to a sheet is not produced.

[0009] When the 2nd supporter material (the 2nd supporter material which supports the back board section of a sheet) which supports the seat of a sheet as mentioned above displaces ahead (upper part) according to the description of claim 1 (claim 2) It constitutes so that a migration inhibition member may be moved up, and even if the sheet is equipped with the buckle section and it prepares for the fixed part of a car body, regardless of this, a migration inhibition member moves up normally. Thereby, in the description of claim 1 (claim 2), the buckle section can respond convenient to both types of a car with which the fixed part of the type of a car with which the sheet was equipped, and a car body was equipped.

[0010] According to the description of [II] claim 2, the 2nd supporter material which supports the back board section of a sheet is supported free [rocking] at the circumference of the axis-of-abscissa heart of the 1st supporter material supported at the car-body side so that it may displace up with the inertial force to the front. By this, according to the description of claim

2, when the 2nd supporter material displaces up with the inertial force to the front, the back board section of the sheet supported at the 2nd supporter material will be displaced ahead, but Since it seems that the seat of a sheet does not displace ahead with the variation rate to the upper part of the 2nd supporter material, when the crew who sat down tries to move and sink ahead to a sheet, it is hard to produce the condition that the seat of a sheet promotes the migration to crew's front, and subduction.

[0011] According to the description of claim 2, the 2nd supporter material is not made to support the seat of a sheet furthermore. When it constituted so that a member other than the 2nd supporter material might be made to support and the 2nd supporter material displaces up with the inertial force to the front, as [displace / the seat of a sheet / with the variation rate to the upper part of the 2nd supporter material / ahead] -- the seat of a sheet seems in addition, not to displace up with the variation rate to the upper part of the 2nd supporter material When the crew who sat down tries to move and sink ahead to a sheet by this, it is further hard coming to generate the condition that the seat of a sheet promotes the migration to crew's front, and subduction.

[0012] When the 2nd supporter material is supported free [rocking] at the circumference of the axis-of-abscissa heart of the 1st supporter material by which the back board section of a sheet was supported by the 2nd supporter material, and was supported like the description of [III] claim 2 at the car-body side, the back board section of the sheet which is a heavy lift comparatively will be located above the 2nd supporter material (axis-of-abscissa heart of the 1st supporter material). Thereby, according to the description of claim 2, the comparatively big moment based on the back board section of a sheet will occur with the inertial force to the front, the 2nd supporter material will displace up certainly, the variation rate to the upper part of the 2nd supporter material is mechanically transmitted to a migration inhibition member by the coordinated means, and a migration inhibition member comes to move up certainly.

[0013] According to the description of [IV] claim 3, the preceding clause [I] - [III] are equipped with the "operation" of a publication like claim 1 or the case of 2, and, in addition to this, it has the following "operations." Since the 1st supporter

material supported at the car-body side is equipped with the migration inhibition member according to the description of claim 3, the migration inhibition member is in the condition of not displacing, to the variation rate ahead of the 2nd supporter material (upper part). Since a migration inhibition member will move up in the condition of not displacing, by this according to the description of claim 3 even if the 2nd supporter material displaces ahead (upper part) with the inertial force to the front, the condition that the crew who sat down is going to move and sink ahead to a sheet is stabilized by the migration inhibition member, and comes to be prevented.

[0014] When the 2nd supporter material which supports the seat of a sheet is supported like especially the description of claim 1 so that it may displace ahead to the 1st supporter material supported at the car-body side If the 1st supporter material is equipped with a migration inhibition member like the description of claim 3, in connection with the 2nd supporter material displacing ahead, a migration inhibition member will be in the condition of displacing back relatively to the 2nd supporter material (seat of a sheet). By this, if the 2nd supporter material (seat of a sheet) displaces ahead with the inertial force to the front according to the description of claim 3 Since the migration inhibition member which moved up will be in the condition of displacing back relatively to the 2nd supporter material (seat of a sheet), it will be in the condition that a migration inhibition member pushes relatively back the thigh of the crew who is going to move and sink ahead to a sheet.

[0015] According to the description of [V] claim 4, the preceding clause [I] - [IV] are equipped with the "operation" of a publication like any one case among claims 1-3, and, in addition to this, it has the following "operations." If according to the description of claim 4 the variation rate ahead of the 2nd supporter material (upper part) is prevented as the inertial force to the front is under the set point, and the inertial force to the front becomes large beyond the set point, it has a maintenance means to hold the 2nd supporter material so that the variation rate ahead of the 2nd supporter material (upper part) may be allowed. Thereby, according to the description of claim 4, even if crew gets on and off or it adjusts the location of the cross direction of a

sheet in an anticipated-use condition, the condition that it is said that the 2nd supporter material moves ahead (upper part) is not produced.

[0016] According to the description of [VI] claim 5, preceding clause [I] - [V] is equipped with the "operation" of a publication like any one case among claims 1-4, and, in addition to this, it has the following "operations." According to the description of claim 5, the 1st supporter material is supported free [repositioning and location immobilization] along with the cross direction by the interior material of a proposal fixed to the car body. Thereby, according to the description of claim 5, the location of the cross direction of a sheet can be adjusted convenient by repositioning and location fixing the 1st supporter material along with a cross direction. If the crew who sat down is going to move and sink ahead to a sheet and the inertial force to the front is applied to the 2nd supporter material, the 2nd supporter material will displace ahead (upper part), and a migration inhibition member will move up normally.

[0017]

[Embodiment of the Invention] Drawing 1 also hangs down seat 1a of a sheet 1, and the back in the sheet 1 (a driver's seat and passenger seat) of a passenger car, near section 1b is shown, the lower rail 2 of a Uichi Hidari pair is being fixed to the fixed part of a car body to one sheet 1, and the upper rail 3 of a right-and-left pair is supported free [migration to a cross direction] along with the lower rail 2. The wall-like 1st supporter material 4 of a Uichi Hidari pair is being fixed to the upper rail 3, and it has the lock device (not shown) which can fix an upper rail 3 freely in a desired location to the lower rail 2.

[0018] As shown in drawing 1 , pin 5a which the 2nd supporter material 5 of the Uichi Hidari pair in the shape of an angle was fixed to the lower part of seat 1a of a sheet 1, and was fixed to it by the 2nd supporter material 5 is inserted in long hole 4a of the 1st supporter material 4. side view -- "-- passing -- " -- the character-like actuation arm 6 of a Uichi Hidari pair is attached in the 1st supporter material 4 with the rivet 7 with a stage, the front end of the actuation arm 6 is covered and the rod 8 is constructed.

[0019] As shown in drawing 1 , the rivet 9 with a stage is attached

in the back end of the actuation arm 6, and the rivet 9 with a stage is inserted in long hole 4b of the shape of radii of the 1st supporter material 4, and long hole 5b of the 2nd supporter material 5. The buckle section 11 (seat belt support) is attached in the support shaft 10 fixed to the 2nd supporter material 5 of the method of Uichi Hidari, and the stop metallic ornaments 13 by which it let the seat belt 12 pass are inserted in the buckle section 11, and it fixes.

[0020] The condition which shows in drawing 1 is in an anticipated-use condition, a rod 8 is located in the anterior part bottom of seat 1a of a sheet 1, caulking **** immobilization of the rivets 7 and 9 with a stage is carried out in the condition which shows in drawing 1, and seat 1a of a sheet 1 and the actuation arm 6 are being fixed to an upper rail 3 and the 1st supporter material 4 in the condition which shows in drawing 1.

[0021] In the anticipated-use condition shown in drawing 1, the back of a sheet 1 also hangs down to seat 1a of a sheet 1, and the include angle of section 1b is changed. By moving a sheet 1 (upper rail 3) to a lower rail 2, the location of a sheet 1 (upper rail 3) is changed into a cross direction, and it fixes according to the above-mentioned lock device (not shown) in the location of a request of a sheet 1 (upper rail 3). Even if the back of the above sheets 1 also hangs down and it makes include-angle modification of section 1b, and a change to the cross direction of the location of a sheet 1 (upper rail 3), since caulking **** immobilization of the rivets 7 and 9 with a stage is carried out, seat 1a of a sheet 1 and the actuation arm 6 do not move to an upper rail 3 and the 1st supporter material 4 from the condition which shows in drawing 1.

[0022] Next, by the collision of a car, the crew who sat down is going to move and sink ahead (space left of drawing 1) to a sheet 1. If the inertial force (space left of drawing 1) to the big front beyond the set point is applied to a sheet 1 A fixed operation of the rivets 7 and 9 with a stage is overcome. Seat 1a and back board section 1b of a sheet 1, The buckle section 11 and the 2nd supporter material 5 move ahead (space left of drawing 1) to an upper rail 3 and the 1st supporter material 4 (pin 5a of the 2nd supporter material 5 and the rivet 9 with a stage move ahead (space left of drawing 1) along with the long holes 4a and 4b of the 1st supporter material 4).

[0023] When the 2nd supporter material 5 moves ahead to an upper rail 3 and the 1st supporter material 4 as mentioned above, as shown in drawing 2 , according to an operation of long hole 5b of the 2nd supporter material 5 and the rivet 9 with a stage Rocking actuation of the actuation arm 6 is carried out by using the rivet 7 with a stage as the supporting point at the space clockwise rotation of drawing 2 . If the anterior part of seat 1a of a sheet 1 is raised up with a rod 8 and pin 5a of the 2nd supporter material 5 and the rivet 9 with a stage arrive at the space left end of drawing 2 in the long holes 4a and 4b of the 1st supporter material 4 Seat 1a of a sheet 1 and back board section 1b, the buckle section 11, and the 2nd supporter material 5 stop to an upper rail 3 and the 1st supporter material 4. Thus, by raising the anterior part of seat 1a of a sheet 1 up, the condition that the crew who sat down is going to move and sink ahead to a sheet 1 is prevented.

[0024] In this case, since the actuation arm 6 is attached in the 1st supporter material 4 which is the part of a location fixed condition to seat 1a of a sheet 1 as shown in drawing 1 and drawing 2 If seat 1a of a sheet 1 moves ahead (space left of drawing 1) to an upper rail 3 and the 1st supporter material 4, it will be in the condition that a rod 8 moves back (method of the space right of drawing 2) to seat 1a of a sheet 1. If rocking actuation of the actuation arm 6 is carried out by using the rivet 7 with a stage as the supporting point at the space clockwise rotation of drawing 2 , a rod 8 will be in the condition of moving back (method of the space right of drawing 2), drawing the locus of radii and moving up. Since seat 1a of a sheet 1 and the back also hang down and the buckle section 11 (seat belt 12) also moves ahead together with section 1b as shown in drawing 1 and drawing 2 , seat 1a of a sheet 1 and the back also hang down, and it is changeless to the physical relationship of section 1b and the buckle section 11 (seat belt 12).

[0025] According to the above structure, the crew who sat down as shown in drawing 2 is going to move ahead to a sheet 1, and it is going to sink. If seat 1a of a sheet 1 and back board section 1b, the buckle section 11, and the 2nd supporter material 5 move ahead to an upper rail 3 and the 1st supporter material 4, where abbreviation immobilization of the lumbar part of the crew who sat

down is carried out to seat 1a of a sheet 1. The condition that the part in which the anterior part of seat 1a of a sheet 1 is raised tends to be in the condition (condition which moves back relatively while a rod 8 moves up to seat 1a of a sheet 1) of moving back, and the crew who sat down is going to move and sink ahead to a sheet 1 is prevented exactly.

[0026] As immobilization by caulking of the rivets 7 and 9 with a stage is abolished and the structure shown in [1st exception gestalt of implementation of invention] drawing 1 and drawing 2 is shown in drawing 3, Pins 4c and 4d are fixed to the 1st supporter material 4 on either side. Pin 4c of the 1st supporter material 4 on either side, and pin 5a of the 2nd supporter material 5 on either side. You may constitute so that the spring 14 with which pin 4d of the 1st supporter material 4 on either side and the rivet 9 with a stage of the actuation arm 6 on either side were covered, it was extended by free length, and the initial hauling force was given to the list may be connected.

[0027] By this, if the inertial force (space left of drawing 3) to the big front beyond the initial hauling force of a spring 14 is applied to a sheet 1, the initial hauling force of a spring 14 will be overcome, seat 1a of a sheet 1 and the back will also hang down, and section 1b, the buckle section 11, and the 2nd supporter material 5 will move ahead (space left of drawing 3) to an upper rail 3 and the 1st supporter material 4.

[0028] It may replace with [Embodiment of the Invention] and the [1st exception gestalt of implementation of invention] of the [2nd exception gestalt of implementation of invention] above-mentioned, and as shown in drawing 4 and drawing 6, you may constitute. As shown in drawing 4 and drawing 6, in the sheet 1 (a driver's seat and passenger seat) of a passenger car, like drawing 1, the lower rail 2 of a right-and-left pair is being fixed to the fixed part of a car body, and the upper rail 3 of a right-and-left pair is supported free [migration to a cross direction] along with the lower rail 2. The wall-like 1st supporter material 15 of a Uichi Hidari pair is being fixed to the upper rail 3, it has the lock device (not shown) which can fix an upper rail 3 freely in a desired location to a lower rail 2, and seat 1a of a sheet 1 is attached in the 1st supporter material 15.

[0029] As shown in drawing 4 and drawing 6, the actuation arm 16

of a right-and-left pair is attached in the pars intermedia of the 1st supporter material 15 with the rivet 17 with a stage, the front end of the actuation arm 16 is covered and the rod 18 is constructed. The balance arm 19 of a Uichi Hidari pair is attached in the 1st supporter material 15 with the rivet 20 with a stage, and the rivet 21 with a stage of the actuation arm 16 is inserted in long hole 19a of the balance arm 19.

[0030] As shown in drawing 4 and drawing 6, the anterior part of the plate-like 2nd supporter material 22 of a right-and-left pair is attached in the anterior part of the 1st supporter material 15 with the rivet 23 with a stage, the back of a sheet 1 is also hung down to the posterior part of the 2nd supporter material 22, and the lower part of section 1b is attached in it through the recliner section 24. The rivet 25 with a stage of the 2nd supporter material 22 is inserted in long hole 19b of the balance arm 19. The buckle section 11 (seat belt support) is attached in the support shaft (not shown) fixed to the 1st supporter material 15 of the method of Uichi Hidari, and the stop metallic ornaments 13 by which it let the seat belt 12 pass are inserted in the buckle section 11, and it fixes.

[0031] The condition which shows in drawing 4 is in an anticipated-use condition, a rod 18 is located in the anterior part bottom of seat 1a of a sheet 1, caulking **** immobilization of the rivets 17, 20, 21, 23, and 25 with a stage is carried out in the condition which shows in drawing 4, to an upper rail 3 and the 1st supporter material 15, the back of a sheet 1 also hangs down and section 1b and the actuation arm 16 are being fixed in the condition which shows in drawing 4.

[0032] In the anticipated-use condition shown in drawing 4, the back of a sheet 1 also hangs down to seat 1a of a sheet 1 by the recliner section 24, and the include angle of section 1b is changed. By moving a sheet 1 (upper rail 3) to a lower rail 2, the location of a sheet 1 (upper rail 3) is changed into a cross direction, and it fixes according to the above-mentioned lock device (not shown) in the location of a request of a sheet 1 (upper rail 3). Even if the back of the above sheets 1 also hangs down and it makes include-angle modification of section 1b, and a change to the cross direction of the location of a sheet 1 (upper rail 3), since caulking **** immobilization of the rivets 17, 20, 21, 23,

and 25 with a stage is carried out, it does not move from the condition that the back of a sheet 1 also hangs down and section 1b and the actuation arm 16 show drawing 4 to an upper rail 3 and the 1st supporter material 15.

[0033] Next, by the collision of a car, the crew who sat down is going to move ahead (space left of drawing 4) to a sheet 1, and it is going to sink. If the inertial force (space left of drawing 4) to the big front beyond the set point is applied to a sheet 1, a fixed operation of the rivets 17, 20, 21, 23, and 25 with a stage will be overcome, the back of a sheet 1 will also hang down, and section 1b and the 2nd supporter material 22 will rock ahead (upper part) to the circumference of the rivet 23 with a stage.

[0034] As mentioned above, if back board section 1b of a sheet 1 and the 2nd supporter material 22 rock ahead (upper part) to the 1st supporter material 15 As shown in drawing 5 , rocking actuation of the balance arm 19 is carried out by the 2nd supporter material 22 at the circumference of the rivet 20 with a stage at a space counterclockwise rotation. Rocking actuation of the actuation arm 16 is carried out by the balance arm 19 at the circumference of the rivet 17 with a stage at a space clockwise rotation. The anterior part of seat 1a of a sheet 1 is raised up with a rod 18, the 2nd supporter material 22 **** for a stopper (not shown), and rocking to the front (upper part) of back board section 1b of the sheet 1 beyond this and the 2nd supporter material 22 is stopped. Thus, by raising the anterior part of seat 1a of a sheet 1 up, the condition that the crew who sat down is going to move and sink ahead to a sheet 1 is prevented.

[0035] In this case, since the rivet 17 (actuation arm 16) with a stage is attached in the 1st supporter material 15 in which seat 1a of a sheet 1 was attached as shown in drawing 4 and drawing 5 , even if the back of a sheet 1 also hangs down and section 1b and the 2nd supporter material 22 rock ahead (upper part) to the 1st supporter material 15, the location of the rivet 17 (actuation arm 16) with a stage does not change. By this, it will be in the condition that the actuation arm 16 moves back (method of the space right of drawing 5) for a while, as for a rod 18, drawing the locus of radii by carrying out rocking actuation to the circumference of the rivet 17 with a stage at a space clockwise rotation, and moving up, in the condition that the location of the

rivet 17 with a stage does not change. Since the buckle section 11 is attached in the 1st supporter material 15 as shown in drawing 4 and drawing 5 , even if the back of a sheet 1 also hangs down and section 1b and the 2nd supporter material 22 rock ahead (upper part) to the 1st supporter material 15, it is changeless to the physical relationship of seat 1a of a sheet 1, and the buckle section 11 (seat belt 12).

[0036] As shown in drawing 4 and drawing 5 , when the anterior part of the 2nd supporter material 22 is attached in the anterior part of the 1st supporter material 15 with the rivet 23 with a stage and the 2nd supporter material 22 rocks up to the 1st supporter material 15, the migration stroke of the posterior part (rivet 25 with a stage) of the 2nd supporter material 22 is big. The rivet 17 with a stage is attached in the pars intermedia of the 1st supporter material 15, and spacing of the rivet 17 with a stage and a rod 18 is big compared with spacing of the rivets 17 and 21 with a stage in the actuation arm 16. Thereby, when back board section 1b of a sheet 1 and the 2nd supporter material 22 rock ahead (upper part) to the 1st supporter material 15, the migration stroke to the upper part of a rod 18 is big.

[0037] According to the above structure, the crew who sat down as shown in drawing 5 is going to move ahead to a sheet 1, and it is going to sink. When back board section 1b of a sheet 1 and the 2nd supporter material 22 rocked ahead (upper part) to the 1st supporter material 15, where abbreviation immobilization of the lumbar part of the crew who sat down is carried out to seat 1a of a sheet 1 The condition that the part in which the anterior part of seat 1a of a sheet 1 is raised tends to be in the condition (condition which moves back for a while while a rod 18 moves up to seat 1a of a sheet 1) of moving back, and the crew who sat down is going to move and sink ahead to a sheet 1 is prevented exactly.

[0038] In [Embodiment of the Invention] [of the [3rd exception gestalt of implementation of invention] above-mentioned] - [the 2nd exception gestalt of implementation of invention]

Immobilization by caulking of the rivets 7, 9, 17, 20, 21, 23, and 25 with a stage may be abolished, and without using a spring 14, for the 1st supporter material 4 and 15 and the 2nd supporter material 5 and 22 which are shown in drawing 1 , and 3 and 4, you may constitute so that a shear pin (not shown) may be inserted.

[0039] If the inertial force to the big front beyond the set point is applied to a sheet 1 by this, a shear pin will be cut by shear, and will also hang down seat 1a of a sheet 1, and the back in drawing 1 and drawing 3, and section 1b, the buckle section 11, and the 2nd supporter material 5 will move ahead to an upper rail 3 and the 1st supporter material 4. In drawing 4, the back of a sheet 1 also hangs down and section 1b and the 2nd supporter material 22 rock ahead (upper part) to the 1st supporter material 15.

[0040] Although it constitutes in [Embodiment of the Invention] [of the [4th exception gestalt of implementation of invention] above-mentioned] - [the 3rd exception gestalt of implementation of invention] so that the anterior part of seat 1a of a sheet 1 may be raised up with rods 8 and 18 It is made to seldom raise the anterior part of seat 1a of a sheet 1 up with rods 8 and 18. By preventing it with rods 8 and 18, as it responds to the condition of the anterior part of seat 1a of a sheet 1 being pushed by the thigh of the crew who the crew who sat down was going to move and sink ahead to the sheet 1, and sat down, and sinking You may constitute so that the condition that the crew who sat down is going to move and sink ahead to a sheet 1 may be prevented.

[0041] [Embodiment of the Invention] [of the [5th exception gestalt of implementation of invention] above-mentioned] - "in 4th exception gestalt] of implementation of invention, the support shaft 10 shown in drawing 1 and drawing 3 and the buckle section 11 may be constituted so that it may prepare for the fixed part (lower rail 2 side) of the 1st supporter material 4 or a car body. In above-mentioned [Embodiment of the Invention] and 1st exception gestalt] of implementation of "invention If the back of the sheet 1 shown in drawing 1 and drawing 3 also hangs down, an upper rail 3 and the 1st supporter material 4 are made to support section 1b and the inertial force to the big front beyond the set point is applied to a sheet 1 Seat 1a of a sheet 1 and the 2nd supporter material 5 may move ahead to an upper rail 3 and the 1st supporter material 4, and they may constitute back board section 1b of a sheet 1 so that it may not move.

[0042] If seat 1a of a sheet 1 is attached in the 2nd supporter material 22 instead of the 1st supporter material 15 and the inertial force to the big front beyond the set point is applied to

a sheet 1 in the above-mentioned [2nd exception gestalt of implementation of invention] Seat 1a of a sheet 1 and back board section 1b, and the 2nd supporter material 22 may constitute so that it may rock ahead (upper part) to the 1st supporter material 15. In the minivan of not only the sheet 1 (a driver's seat and passenger seat) of a passenger car but 3 train sheet form etc., this invention can be applied also to the independent-type sheet of eye such two trains, when the independent-type sheet instead of bench form is adopted as the sheet of eye two trains.

[0043]

[Effect of the Invention] By moving up the migration inhibition member arranged at the anterior part bottom of the seat of a sheet according to the description of claim 1 (claim 2) In the sheet structure of the car constituted so that the condition that the crew who sat down is going to move and sink ahead to a sheet might be prevented By the 2nd supporter material (the 2nd supporter material which supports the back board section of a sheet) which supports the seat of a sheet displacing ahead (upper part) with the inertial force to the front, and constituting with the inertial force to the front, so that a migration inhibition member may move up It was able to avoid producing the condition that it is said that a seat belt loosens to a sheet. This became as [prevent / the condition that the seat belt not loosening and the crew who sat down conjointly are going to move and sink ahead to a sheet / exactly]. In this case, since the power generator which operates a migration inhibition member up by generating gas explosively like the inflator of air bag equipment is not used according to the description of claim 1 (claim 2), it has the advantage referred to as advantageous in respect of reduction of a production cost as it is.

[0044] Since it can respond convenient to both types of a car with which the fixed part of the type of a car by which the migration inhibition member moved up normally regardless of this even if the sheet was equipped with the buckle section according to the description of claim 1 (claim 2) and it prepared for the fixed part of a car body, and the sheet was equipped with the buckle section, and a car body was equipped, it is high [of versatility].

[0045] When the 2nd supporter material displaces up with the inertial force to the front according to the description of claim

2, As [displace / the seat of a sheet / with the variation rate to the upper part of the 2nd supporter material / ahead] Since it is hard to produce the condition that the seat of a sheet promotes the migration to crew's front, and subduction when the crew who sat down tries to move and sink ahead to a sheet In respect of saying that the condition that the crew who sat down is going to move and sink ahead to a sheet is prevented exactly, it will become advantageous. According to the description of claim 2, the 2nd supporter material is not made to support the seat of a sheet furthermore. When it constituted so that a member other than the 2nd supporter material might be made to support and the 2nd supporter material displaces up with the inertial force to the front, as [displace / the seat of a sheet / with the variation rate to the upper part of the 2nd supporter material / ahead] -- in addition, since it seems that the seat of a sheet does not displace up with the variation rate to the upper part of the 2nd supporter material The crew who sat down is the field referred to as preventing exactly the condition of moved and sinking ahead to a sheet, and will become still more advantageous.

[0046] According to the description of claim 2, the comparatively big moment based on the back board section of a sheet will occur with the inertial force to the front. Since the 2nd supporter material will displace up certainly, the variation rate to the upper part of the 2nd supporter material is mechanically transmitted to a migration inhibition member by the coordinated means and a migration inhibition member comes to move up certainly In respect of saying that the condition that the crew who sat down is going to move and sink ahead to a sheet is prevented exactly, it will become advantageous.

[0047] According to the description of claim 3, it has above-mentioned claim 1 or the "effect of the invention" of 2 like claim 1 or the case of 2, and, in addition to this "effect of the invention", has the following "effects of the invention." According to the description of claim 3, even if the 2nd supporter material displaces ahead (upper part) with the inertial force to the front Since a migration inhibition member will move up, and the condition that the crew who sat down is going to move and sink ahead to a sheet is stabilized by the migration inhibition member and it comes to be prevented in the condition of not displacing In respect of

saying that the condition that the crew who sat down is going to move and sink ahead to a sheet is prevented exactly, it became advantageous.

[0048] When the 2nd supporter material which supports the seat of a sheet is supported like the description of claim 1 so that it may displace ahead to the 1st supporter material supported at the car-body side If the 2nd supporter material (seat of a sheet) displaces ahead with the inertial force to the front according to the description of claim 3 The migration inhibition member which moved up will be in the condition of displacing back relatively to the 2nd supporter material (seat of a sheet). Since it will be in the condition that a migration inhibition member pushes relatively back the thigh of the crew who is going to move and sink ahead to the seat of a sheet, it will become advantageous in respect of saying that the condition that the crew who sat down is going to move and sink ahead to a sheet is prevented exactly.

[0049] According to the description of claim 4, it has the "effect of the invention" of claims 1-3 like any one case among claims 1-3, and, in addition to this "effect of the invention", has the following "effects of the invention." Since according to the description of claim 4 the condition that it is said that the 2nd supporter material moves ahead (upper part) is not produced even if crew gets on and off or it adjusts the location of a sheet to a cross direction in an anticipated-use condition, in an anticipated-use condition, a sheet can be used convenient.

[0050] According to the description of claim 5, it has the "effect of the invention" of claims 1-4 like any one case among claims 1-4, and, in addition to this "effect of the invention", has the following "effects of the invention." According to the description of claim 5, since the location of the cross direction of a sheet can be adjusted to the interior material of a proposal fixed to the car body convenient by supporting the 1st supporter material free [repositioning and location immobilization] along with a cross direction, in an anticipated-use condition, a sheet can be used for it convenient.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The vertical section side elevation of a near [the 1st and 2nd supporter material in an anticipated-use condition]

[Drawing 2] The vertical section side elevation of a near [the 1st and 2nd supporter material in the condition that the 2nd supporter material displaced ahead with the inertial force to the big front beyond the set point]

[Drawing 3] It sets in the 1st exception gestalt of implementation of invention, and is the vertical section side elevation of a near [the 1st and 2nd supporter material in an anticipated-use condition]:

[Drawing 4] It sets in the 2nd exception gestalt of implementation of invention, and is the vertical section side elevation of a near [the 1st and 2nd supporter material in an anticipated-use condition].

[Drawing 5] The vertical section side elevation of a near [the 1st and 2nd supporter material in the condition that the 2nd supporter material displaced up with the inertial force to the big front beyond the set point in the 2nd exception gestalt of implementation of invention]

[Drawing 6] It sets in the 2nd exception gestalt of implementation of invention, and is the crossing top view of a near [the 1st and 2nd supporter material in an anticipated-use condition].

[Description of Notations]

1 [] Sheet

1a [] the seat of a sheet

1b [] the back board section of a sheet
2 [] Interior Material of Proposal
4 15 The 1st supporter material
5 22 The 2nd supporter material
7, 9, 14, 17, 20, 21, 23, 25 Maintenance means
6, 16, 19 Coordinated means
8 18 Migration inhibition member

[Translation done.]

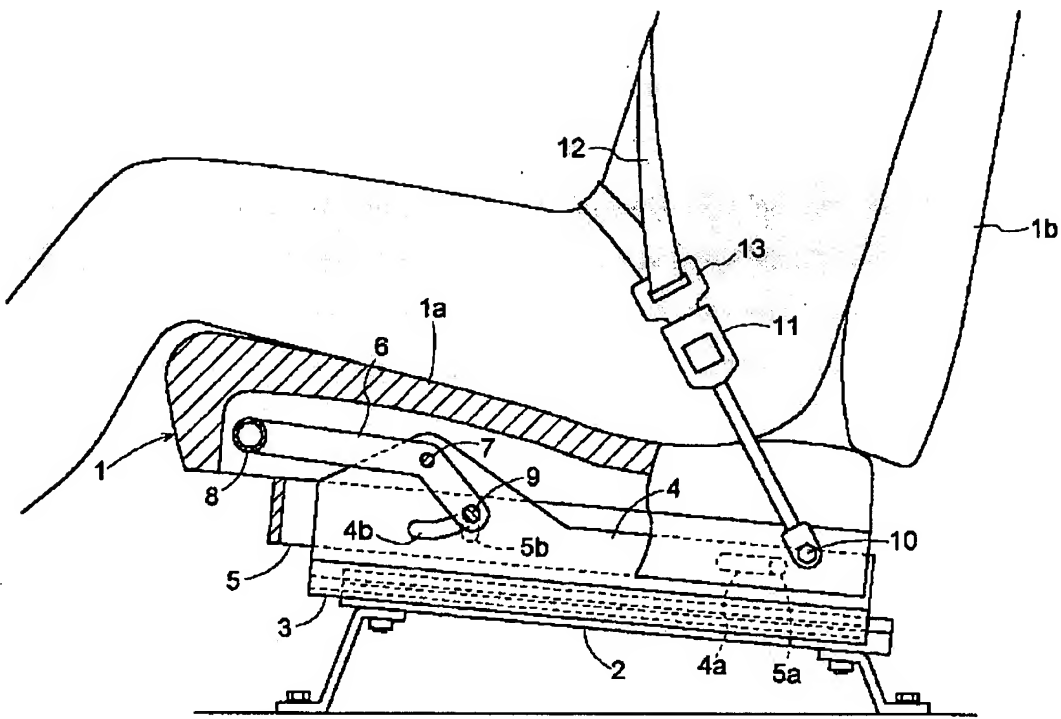
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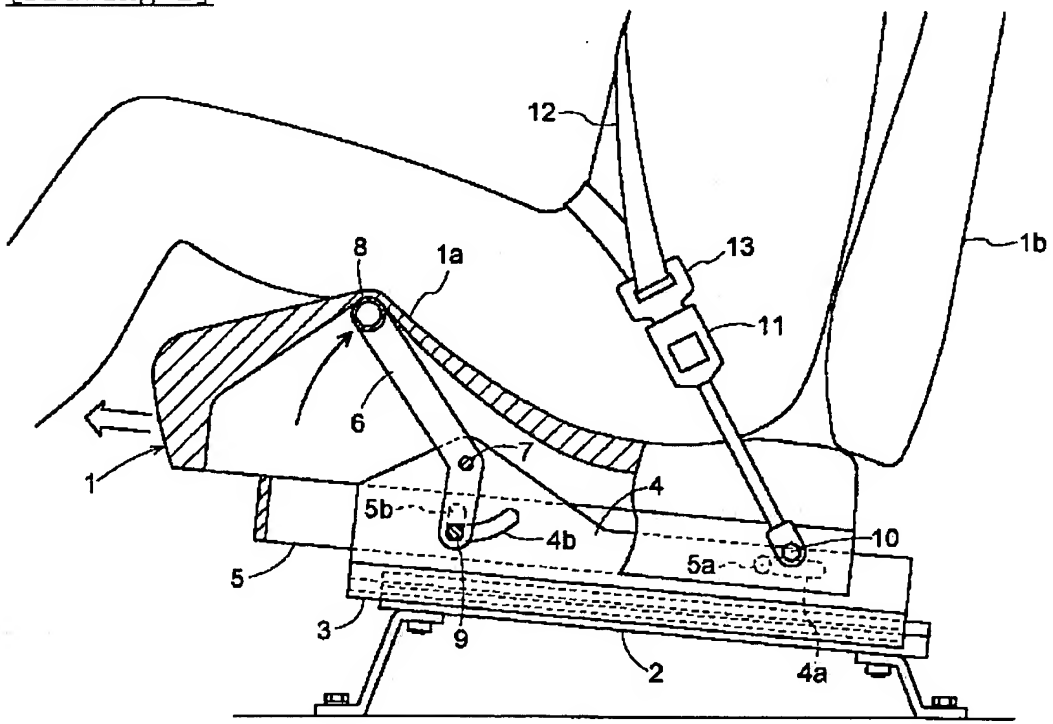
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DRAWINGS

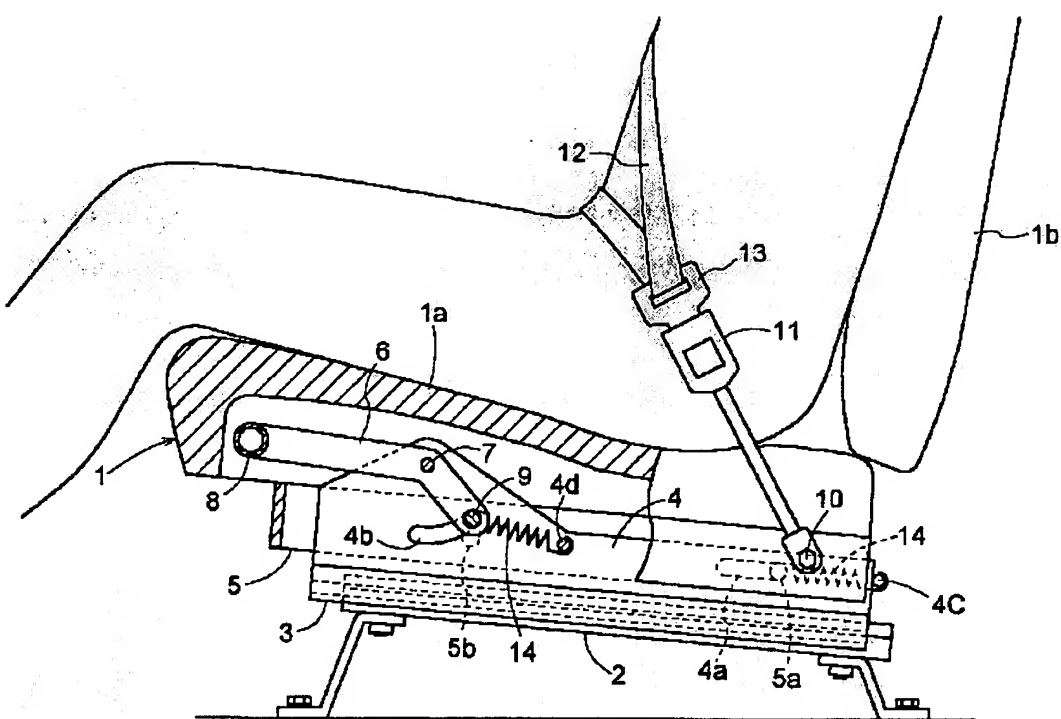
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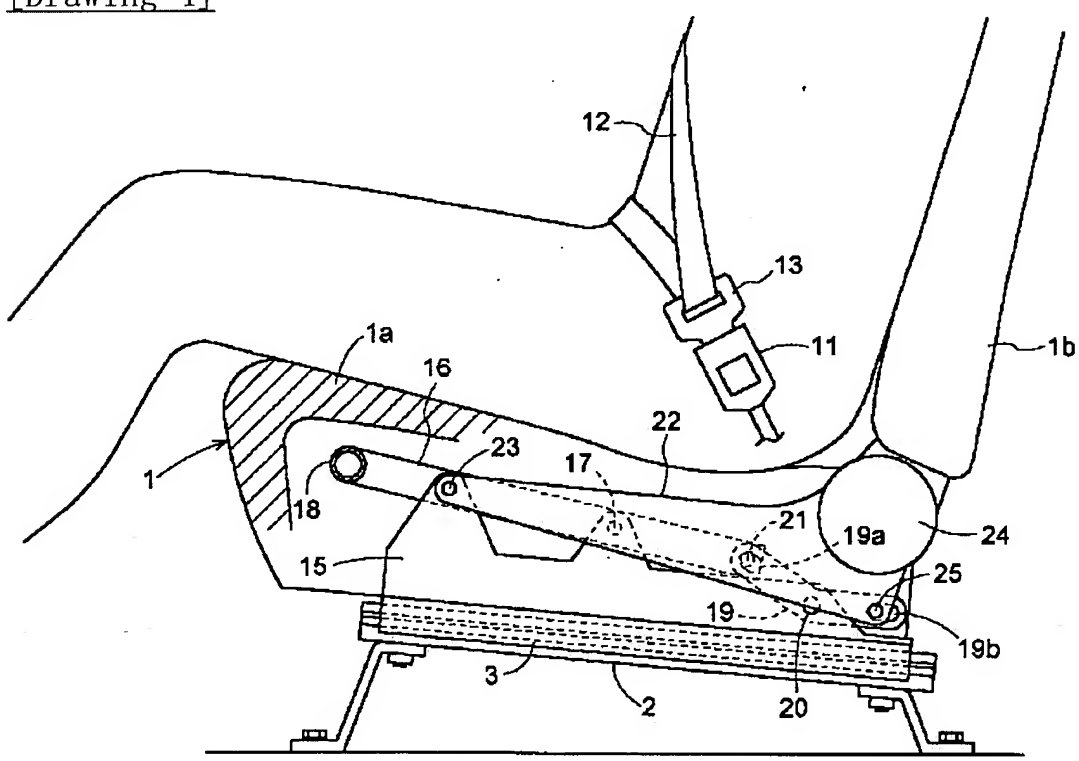
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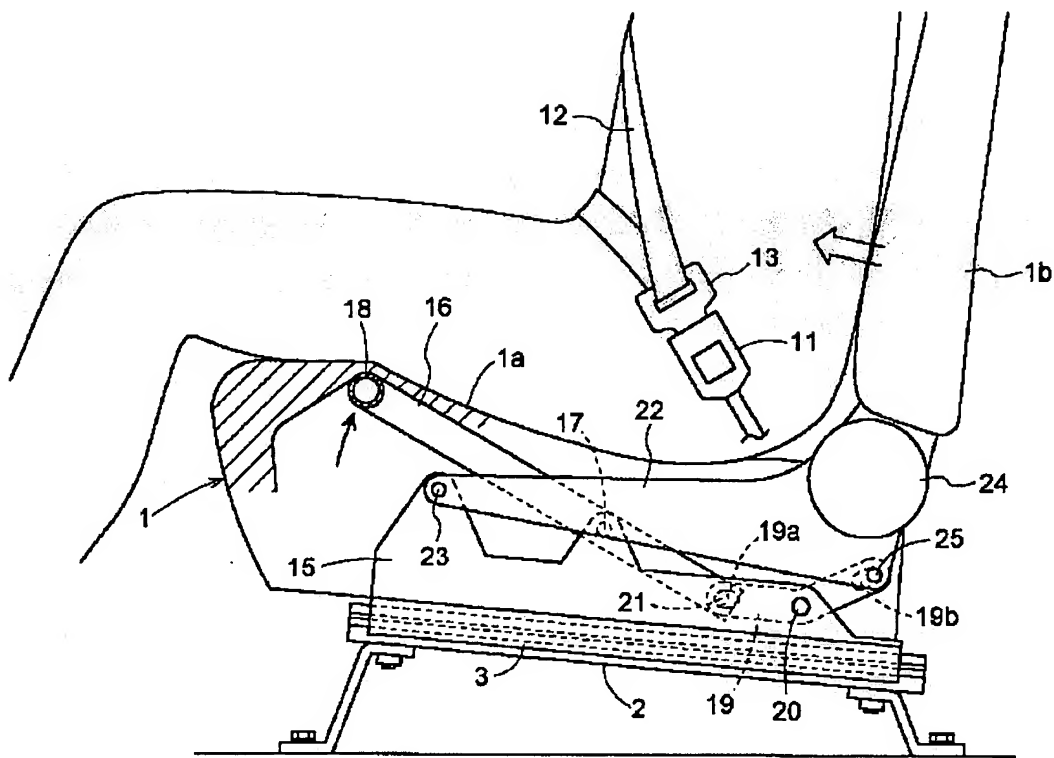
[Drawing 3]



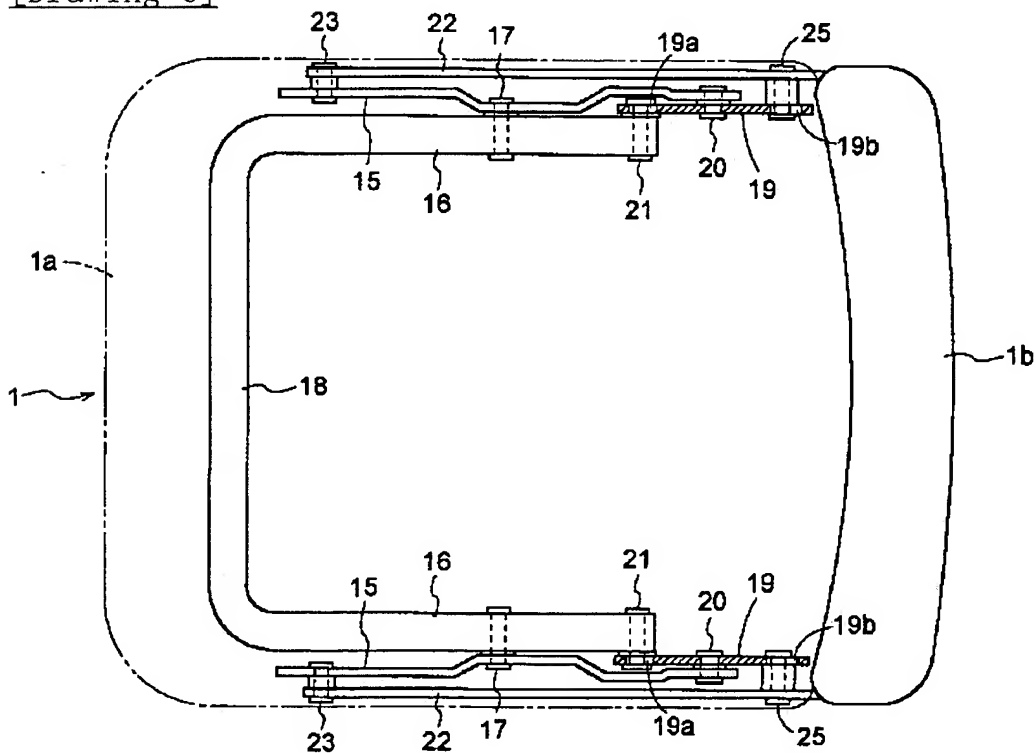
[Drawing 4]



[Drawing 5]



[Drawing 6]



[Translation done.]